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Cyanide content of gari

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Abstract

500 random samples of gari (a cassava by-product) being hawked for sale in Ibadan markets, in Nigeria, were assayed for hydrocyanic acid (HCN) content. Most of the samples contained detectable amounts of HCN, ranging between 0.8 and 38 mg/kg, and only a very small proportion (0.4%) contained no cyanide. The limit of HCN detection was 0.1 ppm. There was no significant difference ($P < 0.01$) between the mean total cyanide (glycoside-bound plus non-glycosidic) and free cyanide (non-glycosidic) contents, 8.0 ± 6.9 mg HCN/kg and 7.2 ± 5.8 mg HCN/kg, respectively; indicating that an overwhelming proportion of the residual cyanide content of commercial gari could be present in the “free” form. The toxicity implications of free cyanide in cassava diets is briefly discussed.